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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/840,242 | 04/24/2001 | Jeffrey Richard Conrad | 10006621-017 | 3491 |

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HEWLETT-PACKARD COMPANY
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EXAMINER

CHUNG, JI YONG DAVID

ART UNIT PAPER NUMBER

2143

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/840,242 | Applicant(s) CONRAD ET AL. | |
| | Examiner Ji-Yong D. Chung | Art Unit 2143 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11/82005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

1. Applicant's arguments and amendments filed on November 8, 2005 have been carefully considered, but they are not deemed fully persuasive.

Applicant's arguments given in Remarks pertain to the new limitations that have been added through the Amendment. New ground of rejections, set forth below in the remainder of the instant Office action, addresses the issues that Applicant raises with regard to the new limitations.

The Office acknowledges the cancellation of claims 17 and 18.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. **Claims 1, 5-9, and 13-16** are rejected under 35 U. S. C. 103(a) as being unpatentable over Pithawala et al. (Pat. No. US 6,747,957, Pithawala) in view of Trofin et al. (Pat. No. US 6,661,778, Trofin hereinafter) and further in view of Bordonaro et al (Pat. No. 6,868,094, Bordonaro hereinafter).

With reference to **claim 1**, Pithawala discloses a method of managing a network comprising:

transmitting a signal from a network manager to each of plural nodes to determine the availability of each node [Title, Abstract, column 3 lines 3-15];

determining a response time of each node using the signal [column 8, lines 30-38; column 11, lines 24-43]; and

relaying the response time of each node to a database of the network manager [column 8, lines 29-38; column 11, lines 4-13, lines 27-42], wherein the response time is updated based on a regular interval [column 6, lines 54-66; column 8, lines 29-38; column 11, lines 28-43].

Trofin discloses a method of collecting statistics in a data communication network by polling the status of the nodes using various protocols (e.g., SNMP, ICMP), commonly used for polling nodes within the network (Abstract, column 3, lines 9-15) comprising:

sending monitoring packets to each of plurality of nodes wherein the monitoring packets are issued more frequently to high priority nodes and less frequently to low priority nodes [column 3, lines 26-34; column 3, line 54 to column 4, line 11];

receiving a response from each of the plurality of nodes [column 3, lines 26-34; column 3, line 54 to column 4, line 11];

determining status information for each node [column 3 line 54 to column 4 line 11]; and
storing the status information in a database wherein the status information is updated based on the node priority [column 3, line 54 to column 4, line 11; column 8, lines 36-44; column 9, lines 7-18].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Pithawala with the teachings of Trofin to update the response time

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based on a node priority, because by assigning high priority to nodes that are more active and by polling them more frequently than low priority nodes, one would improve monitoring resource utilization and put less strain on the network [See from line 52, column 3 to line 11 in column 4].

Neither Pithawala nor Trofin discloses relaying *a start time and an end time of the response time of an identified node*.

However, Bordonaro shows the preceding limitation in lines 30-46, column 7.

Bordonaro shows the advantage of having the three time parameters from line 62, column 7 to line 5 in column 9. By having the three time parameters, Bordonaro computes the delays associated with the network as well as the node, and therefore can accurately derive the performance of each.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a response time, a start time, and an end time, because as Bordonaro shows, with the parameters, one can compute the relative performance of the network, in addition to the performance of the node (in accordance with Pithawala).

With reference to **claim 5**, Pithawala discloses a method wherein the signal is an Internet Control Message Protocol (ICMP) echo request and an ICMP echo reply [Abstract, column 3, lines 3-15; column 6, line 57 to column 7, line 7].

With reference to **claim 6**, Pithawala discloses a method wherein the plural nodes comprise substantially all nodes of the network [column 1, line 61 to column 2 line 3].

With respect to **claim 7**, Trofin discloses a method comprising designating at least one of the plural nodes as one of a high priority node and a low priority node; and transmitting the signal to each high priority node more frequently than the signal is transmitted to each low priority nodes [column 3, lines 54-67; column 4, lines 14-21; lines 25-37, column 8, lines 36-44].

With respect to **claim 8**, Pithawala discloses a method wherein the network manager is a Network Node Manager [column 3, lines 39-53].

Claim 9 and 13-16 substantively incorporate the limitations of claims 1 and 5-8, but in apparatus form rather than in method form. The reasons for the rejection of claims 1 and 5-8 apply to claims 9 and 13-16.

4. **Claims 2-4 and 10-12** are rejected under 35 U. S. C. 103(a) as being unpatentable over Pithawala, Trofin, and Bordonaro, and further in view of Forman et al. (Pat. No. 6,178,449, Forman hereinafter).

With respect to **claim 2**, Forman teaches

receiving the response time of each node in a standard format; and

reformatting the response time of each node into a flat file format prior to relaying the response time of each node to the database. See Fig. 4, lines 37-62 in column 5. See from line 60, column 7 to line 6, column 8.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined method of Pithawala, Trofin, and Bordonaro with the teachings of Forman to include the flat file format feature, because historical log files are typically flat files, and data is written to and read from these files by programs on the local system or remote systems using standard file input/output operations and remote file transfer mechanisms [See liens 37-52, column 5 of Forman].

With respect to **claim 3**, Pithawala and Format disclose a method wherein the flat file format comprises: a start time of the response time and a sampling interval; an end time of the sampling interval; the response time in milliseconds; and a node identification number [See Fig. 7, from line 57 in column 6 to line 7 in column 7 of Pithawala. See lines 54-62, lines 9-19 and 30-38 in column 8 of Pithawala. In Forman, see Figs. 4 and 7, lines 37-52 in column 5, from line 60 of column 7 to line 6 in column 8].

Regarding **claim 4**, Pithawala discloses a method wherein the node identification number is an IP address [See Fig. 7. See lines 60-65 in column 9. See lines 53-67 in column 11].

Claims 10-12 substantively incorporates the limitations of claims 2-4, but in apparatus form rather than in method form. The reasons for the rejection of claims 2-4 apply to claims 10-12.

5. **Claims 1, 5-9 and 13-16** are rejected under 35 U. S. C. 103(a) as being unpatentable over Stevenson et al (Pat. No. 6,704,284, Stevenson hereinafter) in view of DeLuca et al (Pat. No., 6,792,455, DeLuca hereinafter), and further in view of Bordonaro.

With respect to **claim 1**, Stevenson discloses a method managing a network comprising:
transmitting a signal from a network manager to each of plural nodes to determine the availability of each node; determining a response time of each node using the signal; and relaying the response time of each node to a database of the network manager. (See Title, from line 63, column 3 to line 21, column 4. See lines 48-55, column 4 and lines 1-27 in column 5. See from line 63 in column 5 to line 7 in column 6].

DeLuca discloses a polling method for collecting client management data from a number of compute nodes wherein the polling agent collect performance data and forward the data to the network manager database, the performance data is updated based on a computer node priority [See Title and Abstract. See lines 26-35 in column 4 and lines 8-21 in column 9. See from line 66 in column 10 to line 10 in column 11. See lines 21-53, column 11].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Stevenson with the teachings of DeLuca to update the response time based on a node priority in order to distinguish between critical nodes and non-critical nodes [lines 31-35 in column 4 of DeLuca] since the polling agents have the ability to limit the transmission of low priority data [See lines 36-37 in column 11 of DeLuca].

Bordonaro shows the advantage of having the three time parameters from line 62, column 7 to line 5 in column 9. By having the three time parameters, Bordonaro computes the delays associated with the network as well as the node, and therefore can accurately derive the performance of each.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a response time, a start time, and an end time, because as Bordonaro shows, with the parameters, one can compute the relative performance of the network, in addition to the performance of the node (in accordance with Pithawala).

With respect to **claim 6**, Stevenson discloses a method wherein the signal is an Internet Control Message Protocol (ICMP) echo request and an ICMP echo reply [Lines 48-55 in column 4].

With respect to **claim 7**, DeLuca discloses a method comprising a designating at least one of the plural nodes as one of a high priority node and a low priority node,; and transmitting the signal to each high priority node more frequently than the signal is transmitted to each low

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priority node [See lines 8-21, column 9. See from line 66 in column 10 to line 10 in column 11. See lines 21-53 in column 11].

With respect to **claim 8**, Stevenson show a method wherein the network manager is a Network Node Manager [See liens 33-42 in column 1. See lines 46-55 in column 4].

Claim 9 and 13-16 substantively incorporate the limitations of claims 1 and 5-8, but in apparatus form rather than in method form. The reasons for the rejection of claims 1 and 5-8 apply to claims 9 and 13-16.

Conclusion

6 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

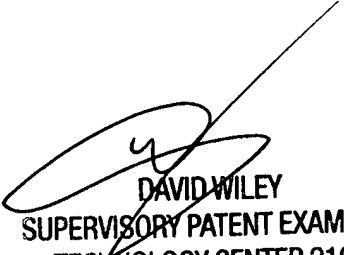
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji-Yong D. Chung whose telephone number is (571) 272-7988. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ji-Yong D. Chung
Patent Examiner
Art Unit: 2143



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